

PLAYER
MANUAL

A COMPUTER GAME OF AERIAL COMBAT DURING WORLD WAR I

EAGLESTM



EAGLES

By Robert Raymond

EAGLES™ is a game that simulates the dogfights and melees that occurred in the skies over France and Germany in the latter half of World War One. You and your friends can take to the skies in the period's finest fighters, battling with and against the computer in hopes of driving your enemy's aircraft from the skies. With a cool head and a sure aim, you may survive, and go on to become the ace of all aces!

So grab your flying gear and climb into your craft. Your mates are ready, the sun is high, the sky clear, and the foe aloft ...

In order to play **EAGLES**, you will need the following.

- An Atari 800 with 40K of memory.
- An Atari 810 Disk Drive.
- An Atari Basic Language Cartridge.

OR

- An Apple II, II+ or IIfx with 48K of memory.
- A Disk Drive.
- Applesoft in ROM.

The following rules booklet is divided into two sections. The first section describes the actual game mechanics, while the second instructs the user on how to generate various game set-ups.

PART I RULES OF PLAY

EAGLES is a simulation of World War I air combat. During play, you will face many of the situations (in game form) that the period's pilots had to face. How you decide to act on these situations can determine the fate of you, your aircraft, and perhaps the outcome of the battle.

A dogfight in **EAGLES** can involve as many as twenty planes. Each of these aircraft has an I.D. number, the numbers running from 1 to 20 (#'s 1 through 10 are always Allied aircraft; #'s 11 through 20 are Germans). If one of the forces in the game is handled by both player pilots as well as computer pilots, the players will control the lower numbered aircraft (i.e. if there are three German planes, of which two are being flown by players, then #11 and #12 will be the players, and #13, the computer).

Play proceeds in rounds from the lowest numbered aircraft to the highest. That is, plane #1 makes his move, followed by plane #2, and so on. After plane #20 completes his turn, plane #1 goes again. Play continues in this fashion until all planes have been shot down or have returned to base.

The field of play is defined in squares running north, south, east and west. Each square represents an area roughly 50 yards on a side. There is also a third dimension of squares, which is altitude. Each level of altitude is 25 feet high. Pilots can "see" targets four squares distant (assume that they do not care about aircraft beyond that distance) and can fire their weapons 1 square out.

Beneath your wings is the network of trenches in which the great armies of the day have become stalemated. The trenches parallel each other, running north to south, and each system covers an area 10 squares in width. The Germans are in the eastern trenches, the Allies are in the western. The two systems of trenches are divided by the area of desolation called "no man's land", which is 20 squares across. Immediately behind (to the east) of the German trenches is the area we fliers call "over the German lines" which is 30 squares in depth. All locations east of that are in "the German rear area". Two similar areas exist behind (to the west) of the Allied trenches. While the above geography lesson may not seem important now, you may lose an engine some day, at which time the location of the friendlies will be of paramount importance.

Weather conditions are also of importance. There is always a wind blowing to the east, which works to move the general location of the fight eastward (towards and/or into German territories). In game terms, there is a 20% chance each round that all aircraft will move one square eastward (note that players will NOT be told that they have been moved). Clouds may also be present. Clouds are assumed to exist between two altitude levels (cloud base altitude and cloud summit altitude). All squares that exist between these altitudes are considered to be in the bank of clouds, and these squares have a visibility range of zero. This serves to make clouds an excellent place to run into if you wish to escape from a pursuer.

At the beginning of a plane's move, the screen will show an overhead view of the plane's immediate (within two squares) surroundings. To the right of this display will be the number of the plane whose turn it is, along with his altitude, the altitude at which clouds are seen, and a list of all available commands. If the plane is controlled by a player, the computer will wait until the player inputs his command. If the computer pilots the plane, then it will proceed with its move. In either case, the result of the move will be shown.

An aircraft's performance is measured in many ways. The back of the rules give listings of all types included in the game (although experienced players can build their own favorite or fantasy aircraft). The maneuver % is the measure of the aircraft's overall agility. The speed % measures the aircraft's top speed and acceleration. The higher these values, the better the plane is in that aspect. Max climb is the number of 25' altitude levels that the plane can climb through during its move. Max dive shows how fast that type can drop in 25' increments.

Note that climbing or diving can, in some cases, affect the plane's maneuver and speed %'s. Generally, every 25' dive adds 5%. This is because aircraft in climbs tend to go slower, and, as they are closer to their stall speeds, turn wider. Diving has the reverse effect. Thus, one can see that having altitude on one's opponent can be an important advantage.

The maneuvers follow ...

(U) and (D) — Altitude change.

Use of these keys results in a climb or dive. You will be asked the number of increments that the change will be, with "1" being 25', "2" being 50' and so on. Dives of 250' and over will use the following keys:

	250'	275'	300'
Atari	0	<	>
Apple II+	0	:	=
Apple IIfx	0	-	=

(O) — Overview.

This command gives the pilot a complete data readout on all aircraft within 4 squares. It will show the distance in squares to each plane (where 2 3 means two squares east and three south), the aircraft's heading, its difference in altitude, and its attitude (**RB** = Right banked, **LB** = Left banked, **LEV** = level, **Z** = Zoom climb [the aircraft is going into an upward half-loop], **SS** = Split S [the aircraft is going into a diving half-loop]). Note that an Overview is valuable for spotting aircraft not shown on your screen display. The Overview can be used as many times as desired.

(G) — Ground location.

This command allows the pilot to get a general idea as to where he is. Note that it does not work if the plane is above the clouds.

The following options end the plane's movement phase.

(N) — Normal.

This will move the aircraft one square forward.

(F) — Fast normal.

This option gives the aircraft a chance to move two squares forward. That chance, expressed as a percentage, is equal to that

...e's Speed %. Altitude changes modify the chances as described above. Failure to make the speed roll causes the aircraft to move only one square. There is always a chance, regardless of the circumstances, that the aircraft might fail.

(L) and (R) — Left and right turns.

The aircraft's ability to turn tightly in a fight is its most important feature. In Eagles, a turn pivots the plane 90 degrees, then moves it one square in the new direction faced. The chance to make a successful turn is equal to the maneuver %, modified by any altitude changes. A failed turn results in a bank instead (see below).

(A) and (B) — Left and right banks.

A bank is just a wider turn, which takes the plane two movement phases to complete. On the first phase, the plane moves forward one square (at this half-way point, the aircraft is listed as RB or LB on the overview). On the second phase of movement, the plane turns 90 degrees towards the direction banked, then moves one square.

(S) and (T) — Left and right slip.

In reality, a aircraft that wishes to slip banks onto one wing and slides sideways, losing altitude. To do a slip in game terms, the aircraft must not have climbed or dived this phase. An aircraft has a percentage chance (loosely based on its maneuver %) which it must make in order to slip properly. A successful slip moves the aircraft diagonally forward one square, while failure moves it only straight ahead. In either case, the plane loses 150 feet of altitude. Note that the aircraft's nose is considered level for gunnery purposes.

(I) and (V) — Climbing and diving half-loops.

Half loops are good ways to get turned about quickly. Both take aircraft two phases to do, and the plane may not make any rotary climbs or dives (U or D options) during these phases.

In a climbing half-loop, the aircraft spends its first phase climbing at its maximum climb rate, while moving forward one square. At this point, it is listed as Z on the overview. On its second phase, it has a percentage chance to clear the half-loop, which is based on both its maneuverability as well as its speed. If successful, the plane remains in its square while turning 180 degrees and climbing some random distance. If it fails, the aircraft stalls and performs as if it were in the maneuver option (see below).

The classic loop is performed by doing a climbing half-loop followed immediately by diving half-loop.

(M) — Maneuver.

The maneuver option is defensive in nature, and represents desperate skidding and rolling to escape a pursuer. To perform a maneuver, the plane may not have climbed or dived this phase. The option randomly assigns a new square to the plane (either its present square, the one in front of it, the one to its right, or the one to its left) as well as a new heading. The plane's altitude also changes randomly and usually downward. Due to its gyrations, the plane will not be allowed to fire its weapons this turn.

(J) — Jam clearing.

Due to an occasional deformed ammunition casing, the player may find himself with jammed guns. To try to clear them, the player may not climb or dive, and the (J) option will move the aircraft just like an (N) option does. The jam clear option will give one of three results:

- The guns may be cleared, so that the battle can be rejoined.
- The guns may be found to be inoperative, whereupon the unlucky pilot can only retire to base.
- The guns are still jammed. This result will occur the most often. Note that the pilot can continue to try to unjam his guns in this case.

— Head home.

This option is used to remove a plane from the game and return him to his base. To do this, a player must be pointing towards home

(east for Germans and west for Allies) and there must not be any enemy aircraft in sight.

(C) — Continue.

This option is used to instruct the computer to continue a two phase option (i.e. banks and half-loops).

SPECIAL KEY FUNCTIONS (Atari)

The START Key

To use this option, the plane must not have climbed or dived this turn. The option is used when one of the players must drop out of the game, and reverts control of the plane from the player to the computer.

The OPTION-SELECT Keys

This option is used to end the game in mid-play. This command can only be activated during mid-turn, not during the option phase. To use, simply hold down the **OPTION** and **SELECT** keys while one of the planes is making its move. The game will then end, and the current conditions of the aircraft will be displayed.

SPECIAL KEY FUNCTIONS (Apple)

At the start of a player's move, a player can give control of his plane to the computer by pressing the "P" key.

To end the game on the Apple, press any key while the last German or Allied plane moves.

End of Turn Altitude Loss

After the last German plane has moved, the computer will make some modifications to the aircraft's positions. Beside figuring out the effect of wind (as mentioned earlier), it will also figure out any additional altitude losses suffered by the aircraft. As the aircraft are scrambling about after each other in their presumably tightest turns with wings close to the vertical, they will continue to lose height. Hence, any aircraft that does any option besides U, D, G, O, N, F, or J will lose 25 to 75 feet of altitude. If a plane drops to an altitude less than 25 feet due to this (or due to the Maneuver option), then it has a 1% chance of hitting the ground. Otherwise, it is boosted back to 25 feet.

GUNNERY

After a plane completes its move, but before the next plane moves, the aircraft may fire its weapons. To do this, several conditions must be met. First, the plane must have its weapons operational. Second, the target must be in the horizontal arc and range of its guns. To do this, the target must be in the same square as the attacker (effective range) or be in the square that the target is facing (long range). Third, the target must be in the vertical arc and range of the guns. If the attacker is flying level (or in a slip) he may shoot at targets within 100 feet of his altitude. If climbing, he may only shoot at targets located from his height to 200 feet above. Diving attackers can shoot at targets located at their level to 200 below. Remember that a plane that uses the Maneuver option may not fire.

If a player has at least one target, the computer will list all possible targets, along with the % chance to hit. This chance is based on both the range to the target as well as the target's deflection (tail shots are best, followed by front shots, and lastly, side shots).

The player then chooses his target, types its I.D. number, and hits **RETURN** (if the player would rather hold his fire, he should only hit **RETURN**). He will then be asked what burst length he will use. The choices are **S** (Short), **M** (Medium) and **L** (Long). Simply hit the proper key, and the computer will list any results of your shots.

Players should remember that the longer the burst, the more ammo is consumed, and the higher the chance of jamming your guns. Planes have enough ammo for roughly 9 short bursts or 5 long bursts.

If you jam, you will still be able to fire your guns, but at the next lower length burst. Short bursts that jam do not get to fire at all.

If the burst hits, the computer figures out just how many of the bullets hit. It then figures out, bullet by bullet, if something vital was hit. For each hit previously made, the chance to hit something vital increases slightly. However, a strongly structured plane has a slightly higher chance of surviving a burst, while a frail aircraft has a lesser chance.

Of course, longer bursts tend to do more damage, and twin machine guns do more than the 'one gun on the deck, one on the wing (as carried by some allied types). Single machine guns do the fewest number of hits.

While many of the hits can destroy or force down a plane, some hits only damage it. Specifically ...

- Pilot lightly wounded: Due to the effects of the wound, the aircraft's Maneuver % drops by 25%.
- Engine begins to miss: The plane's Speed % drops to 0. However, a good dive may make an F maneuver successful. Also, the plane has a new climb rate of 1, and may not do any more climbing half-loops. This hit increases the chance that the engine will stop during future hits.
- Wing struts hit: The plane's dive rate drops 4 to 6 points, and no diving half-loops allowed. If your dive rate drops to less than 1, the plane will crash.

Notes on computer pilots: The computer pilots in the game are supposed to represent the normal, run-of-the-mill pilot who should be used to round out formations and provide solitaire and semi-solitaire options for the players. Note that the players can gang up on a flight of computer pilots, or they can take on each other, with computer pilots as wingmates. However, the user should be aware of the following traits of computer pilots ...

- As soon as a computer pilot loses sight of all other enemy aircraft, it will cut for home. Note that computer pilots do not have to be headed homeward in order to do the H option (This is the only instance in which they play by different rules).
- Computer pilots who jam their guns or find themselves over 100 squares on the wrong side of the lines will dive full out for home.

While computer pilots can hardly be called clever, they are swift scouts armed with machine guns, and they do occasionally pull sneaky moves. Our advice is to keep an eye on them.

PART II SET UP GUIDE

Starting the Game

A) the Atari

To begin a game of *EAGLES*, turn on your disk drive and insert the game disk. Place the BASIC cartridge in the proper slot in your computer, and power up the computer.

You will be asked what chip type your Atari uses. Note that most Ataris manufactured after mid-1982 have the GTIA. To see if your chip type entry is correct, study the Eagles title display (shown after all set up entries have been made). There should be a blue German plane on the right side of the screen pointed down, with a blue cloud of smoke coming from his tail. If he is green, then you have the other chip. Turn off the computer and restart.

B) the Apple

To start a game of *EAGLES*, put the game disk into the disk drive and turn on the computer. After a few seconds a menu will

appear on the screen. The menu will display the changes you can make in the game. You have four items you can change: Pressing **1** changes the German plane strength; pressing **2** changes the Allied plane strength; and pressing **3** changes the game from the normal game to the demo game. Press the **SPACE BAR** to continue.

Next, you will be asked what class of set up you want. The choices are:

- P** : Player controlled.
- R** : Random set up.
- C** : Campaign game set up.

The set up options work in the following ways ...

(R) : RANDOM SET UP. This is the easiest of the set up modes, as the computer takes on the main chore of setting up the game. Hence, it is the one that we suggest you use for your first few games. You will be asked the following questions:

NUMBER OF ALLIED PLAYER PILOTS? This asks how many planes will be player controlled on the Allied side. Type a number from 1 to 10 (0 is ten) for the number of player controlled planes, or 'X' if it is to be completely computer controlled.

NUMBER OF GERMAN PLAYER PILOTS? This is handled as above.

DATE OF COMBAT? This tells the computer the time period of the war that you wish to simulate. Type the corresponding number of the date desired (or '5' if you wish the computer to pick one randomly for you).

SCALE OF COMBAT? The scale refers to the number of aircraft involved per side. The number in parentheses is the number of planes there will be on each side at that scale level. We suggest that you try some Lone Wolf games (one on one) until you get the hang of it.

After answering the above questions, the computer will inform you as to the location of the battle (in reality, almost all the battles took place over German territory. Hence, most of your fights will be behind the German lines). You will also be asked if you would like to use the optional set up rules. These options will be described later in the rules.

(P) : PLAYER CONTROLLED set up. In this mode, the players dictate all aspects of the set up. In order to do this, a good knowledge of the game is needed. The questions asked by this mode are ...

FORMATION SET UP? Allied and German formations are set up by answering questions about the number of planes, which aircraft will be used, and the number of player pilots. The main difference occurs in assigning aircraft. As the British only flew in squadrons of like craft, you are only asked once for plane type. The Germans, on the other hand, tended to group different types of aircraft in their Jastas. For this reason, you will have to tell what EACH plane type will be. Players should note that from this point on, they will have to hit RETURN after each entry.

BATTLE LOCATION. This is the location of the battle's East-West coordinate. **0** is dead center in No Man's Land, while **+** and **- 100** put the fight over that side's airfield. Values greater than this are modified to that 100.

SKY CONDITION. This is where the base and summit altitudes of the clouds are entered. If you do not wish to have clouds, enter **0** for both numbers.

POSITION SET UP. Here you are asked for the headings and positions of the flights. E-W and N-S Differences refer to the number of squares that the Germans are offset from the Allies. East and south are positive values. For example, if there was an E-W difference of 2 and a N-S difference of -3, then the Germans would be 2 squares east and 3 squares north of the Allies. Altitudes are then entered, as is the side which is to move first. Note that you can allow one side a sneak attack (or a "Hun in the sun", as the Allied pilots called it) by placing the ambushers one square directly behind the ambushees, and giving the ambushers the first move. Finally, the computer asks if you wish to use any of the optional rules.

Below are three historic scenarios that can be constructed by use of the player controlled set up mode. The line of code behind **POS** refers to the position set up, i.e. the Allied heading, the E-W difference, the N-S

rence, the German heading, Allied altitude, German altitude, and which side moves first. Note that most books that deal on the subject of World War I air fighting usually provide great detail on the facts, and can be used to set up many interesting games.

• **Scenario #1: OVER THERE** (one or two players). This game recreates the first two victories scored by the U.S. Air Service, which occurred on April 14, 1918. The players take the roles of Alan Winslow and Douglas Campbell, who took off to engage a pair of German scouts who had been sighted over their field. Can you recreate history by downing both Germans?

Allied: 2 NIEUPORT 28's
German: 1 ALBATROS DV, 1 PHALZ DIII
Clouds: NONE
Battle Location: -95
POS.: E, 2, -1, N, 4800, 4700, A

• **Scenario #2: VOSS'S LAST FIGHT** (one player) In this game, you are Werner Voss, victor over 48 Allied craft. While flying your sky-blue Fokker Triplane, you recklessly pursue an Allied craft behind his lines. Before you can finish him off, you glance over your shoulder to see seven SE5a's (led by James McCudden, a ranking British ace) dropping onto your tail. You are outnumbered, but too slow to run away. In reality, Voss swung into the British flight and, in a ten minute battle, managed to put bullets into every British machine before being killed. Can you do better?

Allied: 7 SE5a's
Germans: 1 FOKKER DRI
Clouds: 9000-15000
Battle Location: -40
POS.: S, 1, 0, E, 4200, 4100, G

Special note: Some accounts of the action mention that an Albatros DV came in to help Voss, but was shot down in flames. You may wish to add this plane onto the German side as a second player or computer controlled. Also, if using the optional rules, make Voss and the pilot of SE5a #1 super-aces.

• **Scenario #3: RED AND BLACK** (two players). High above the old fortifications of Lille droned the red-speckled Albatros of Jasta 11. Leading the formation in a green striped Albatros with a white cowl, spinner, and elevators was Karl Allmenroder, victor of 30 air contests. His orders: seek out and destroy the 'Black Flight', whose five Sopwith Triplanes had been so troublesome over the Ypres Salient. Karl's pilots were confident in their leader; after all, had he not shot down one of the Black Flight two days before? But, as they scanned the western skies, the remaining four aircraft of the Black Flight attacked!

The Black Flight leader, Raymond Collishaw, spotted the plane that had downed his comrade and made towards it. Allmenroder accepted combat, as the death of the flight leader would be a major blow to the Black Flight.

In minutes, Allmenroder's plane would smash into the ground. But will it this time?

Allies: 4 SOPWITH TRIPLANES
Germans: 5 ALBATROS DV's
Clouds: NONE
Battle Location: 10
POS.: S, 1, 2, W, 8100, 8000, Flip a coin for the starting side.

Special note: One player is Collishaw, the other, Allmenroder. To win, your opponent must be shot down (major victory if killed or captured, minor if he is shot down in No Man's Land or his lines but still lives). Also, make both players aces.

(C): CAMPAIGN GAME. This set-up procedure is used when players involved in a campaign game, which is a string of games whose outcomes affect each other and whose total outcome rates the individual pilot's success. The rules for the campaign game follow ...

The campaign game is loosely based on Jack D. Hunter's book "The Blue Max". Each player is an ambitious young flier who has

arrived at a combat Jasta early in 1917, with dreams of winning Germany's highest award, the Pour leMerite. Will you end the war as an ace, or just one of the many faceless aviators whom Lady Luck neglected?

The players should have a pencil and paper handy in order to keep track of their progress.

A) TIME: The Campaign game covers the last two years of the war, and is played out in eight games. Thus, the first two games are in early 1917, the next two are in late 1917, and so on. Note that the Campaign game can take several settings to complete, due to the number of games involved.

Your overall performance over each of the three month time periods is based on how you do on that mission. If you shoot down a plane, you are assumed to have brought down a few others during that period. If you don't, then it has been a slow couple of months for you.

B) RANK: This starts at 1, and can range from 1 to 5 during the campaign. It does not represent military rank as much as it represents how you rank in the eyes of your superiors. You gain one Rank for every plane that you shoot down in an **EAGLES** game. You lose one rank for every time that your aircraft is lost (You lose an aircraft if you are shot down and crash-land behind your lines. Planes that are shot down but land safely behind your lines are recoverable, so you can keep both rank and plane. A plane that comes down in your trenches or into No Man's Land is unrecoverable, regardless of condition).

Players will note that as you gain rank, you will be assigned to fly better and better aircraft (as they become available). Also, the computer automatically gives players the optional skill bonuses. At ranks 3 and 4, the player is an ace. At rank 5, the player is a super ace. In addition, the computer will sometimes add a super ace in on the Allied side. As these aces tended to personify their planes' color schemes and fly very well, the players will be told which plane is the super ace. If you shoot him down, you will be in all the papers back home and become famous overnight. This gains you an additional rank.

C) KILLS: This starts at 0, and represents the number of planes that your pilot is assumed to have brought down over each period. To determine your kills, keep track of the I.D. numbers of the planes that you down during a game. The number of kills that you get for the plane is based on where he falls ...

IF HE GOES DOWN

Deep behind Allied lines
Behind Allied lines
Anywhere else

THEN HE IS WORTH

2 Kills
3 Kills
4 Kills

This reflects the fact that kills had to be confirmed in order to be counted. If you bring down most of your planes behind allied lines, you will lose credit due to "lack of witnesses".

Remember that rank is based only on what you actually shoot down IN AN ACTUAL GAME. If you shoot down a plane that falls behind your lines, you advance one rank (not four).

When you have received your 20th kill, you are assumed to have been awarded the Blue Max.

D) SPECIAL NOTES ...

• Players who are killed (i.e. engine explosion, loss of wings, etc.) or captured (by landing in the Allied trenches or territories) lose all rank and kills. If the Campaign involves several players, the lost player may restart another pilot, who has 0 kills and 1 rank.

• Players may not transfer kills and rank between themselves.

• Games must be played in chronological order, with only two games per period.

• Players who are critically wounded will require leave, and will thus not be allowed to play in the following game. Light wounds are fixed in the field, so the pilot loses no flying time.

E) OPTIONAL CAMPAIGN RULES. Some players may wish to add more realism to their campaign by including the following mini-games in their campaign. Each game is set up using the Player Controlled method and optional rules. As these games represent an actual mission and not a period, the number of planes that you shoot down

during the game is the number of kills that you gain. Rank may be lost in these games for being shot down, but you can never gain rank in the mini-games. You must be familiar with the optional set-up rules.

In setting up the games, remember that players who hold Rank 3 or greater are aces, and players at Rank 5 are super aces. Players flew what they flew in the last campaign mission.

MINI-GAME #1: BLOODY APRIL. This represents the period in which the German fighters faced little fighter opposition and many unescorted two-seaters. The British aircrews were mostly green, and many did not return from their first flight.

When Played: BETWEEN GAMES 2 AND 3

Allies: Using the optional rules, substitute in 3 recon two-seaters.

Germans: 5 ALBATROS DIII's

Battle Loc.: 50

POS.: W, 1, 0, W, 5000, 5300, G

MINI-GAME #2: SAUSAGE RUN. The German High Command has been pestered by the presence of an Allied Balloon that has been directing deadly artillery fire into your trenches. Your flight has been ordered to destroy it. Good luck.

When Played: BETWEEN GAMES 4 AND 5

Allies: 2 SE5a's, one balloon.

Germans: Players fly whatever they had last game. If there are less than three players, add in computer wingmates in Phalz D3's. Players may substitute Phalz D3's in place of their aircraft (Phalz's were often used for balloon missions, due to their dive rate and durability). If a player loses a Phalz, his rank stays the game, i.e. his combat fighter is still safe in its hanger

Battle Loc.: -36

POS.: N, 1, -2, W, 1000*, 1000*, G

**Note: the computer will change these altitudes at the start of the fight.*

MINI-GAME #3: CONTACT PATROL. It is the time of Germany's last offensive, and your staffel has been assigned to support a Schlachtstaffeln (A squadron of Hannover CLIIIs trained and assigned to massed ground attacks). Twice today, your flight has provided cover for the Hannovers as they attacked enemy positions. Now, as you once more roar over the heads of your advancing troops, you spot a group of Camels moving in to intercept. Even the Hannovers swing in as the battle begins.

When Played: BETWEEN GAMES 6 AND 7

Allies: 5 SOPWITH CAMELS.

Germans: 4 single-seater fighters, 3 two-seater fighters. Players fly whatever they did in the last game; computer pilots fly ALBATROS DVs.

Clouds: 600-3000.

Battle Loc.: -5

POS.: E, 4, 1, W, 500, 400, A or G (Flip a coin).

MINI-GAME #4: THE ELEVENTH HOUR. Now the tables have turned, and the Allies have air superiority as the war grinds towards its conclusion. Outnumbered, your Jasta continues to defy the Allied formations that it encounters. Now, in early November, 1918, you are entering what may be your last dogfight.

When Played: AFTER GAME 8

Allies: Pick any fighter type available at the war's end. Give the Allies 10 of them.

Germans: Players fly whatever they flew on game 8. The German formation has 5 planes, so let any computer pilots fly ALBATROS DV's.

Battle Loc.: 40

POS.: E, 2, -2, W, 1200, 1000, A or G (Flip a coin)

Special Notes.

- Players who score their 20th kill on this game do not get the Blue Max, as the German Staff has more pressing matters to attend to at this time.

- Players who ended game 8 with a Rank of 5 may wish to fly a special aircraft on this last mission. If their rank is 5, flip a coin to determine which plane it will be, and enter it with the special aircraft function in the optional rules.

HEADS : SIEMENS-SCHUCKERT D.IV

GUNS : 2

MAN % : 60

SPD % : 60

CLIMB : 5

DIVE : 11

STRUCTURE : 75

TAILS : FOKKER DVIII

GUNS : 2

MAN % : 70

SPD % : 55

CLIMB : 4

DIVE : 10

STRUCTURE : 65

OPTIONAL RULES

The optional rules allow players to modify the aircraft generated through the Player Controlled and Random set-up modes. New aircraft types can be generated, and two-seater aircraft and balloons can be included in the game.

When using the optional rules, the screen will display a two-letter code for each aircraft. The first letter denotes the type of aircraft, and translates as ...

F = Standard game fighter.

S = Special aircraft (built through the aircraft construction option).

T = Two-seater recon aircraft.

A = Two-seater fighter.

G = Gunner.

The second letter of the code informs the user as to the type of pilot ...

C = Computer controlled.

P = Player pilot.

A * indicates that that pilot is an ace, a ** is a super-ace.

In the optional rules, you will be able to make the changes as listed below. If you want to get out of one option and move on to the next, hit the RETURN key to continue.

- **FIRST OPTION, AIRCRAFT DELETE.** By entering this mode, the user can prune down one or both sides by simply typing the aircraft's I.D. number. To leave this mode, hit RETURN.

- **SECOND OPTION, SPECIAL AIRCRAFT.** This option allows players to construct almost any single-seater used in World War One, by answering 6 questions. Examples of special aircraft can be found in the mini-games found in the Campaign game. For hints as to values, compare the type that you wish to construct to the types provided as a gauge to the new values.

- **THIRD OPTION, TWO SEATER AIRCRAFT.** Aside from the standard single-seater scout, a second major class of aircraft that appeared over the Western front were the two-seaters. Slightly larger than their single-seater counterparts, these craft carried two men. The pilot, usually armed with a single fixed machine gun, manned the front cockpit. Behind him, facing rearward, was his observer. The observer's tasks ranged from taking photos and directing artillery on enemy positions to fending off fighter attacks with his rear-mounted swivel machine gun. While generally sluggish in the air, several types possessed good maneuverability and turning speed, and were used as two-seated fighters.

Two seaters in **EAGLES** require the space normally used by two aircraft. The gunner occupies the first location, which is an odd numbered I.D. number. His aircraft is the following even number. This will result in the gunner firing before the plane actually moves.

Gunner's weapons can hit targets at up to 200 feet altitude difference. They can shoot at targets in the squares to the right and left of their plane, and to the square directly behind. However, in their own square, the tail of their plane blocks fire at targets that share their altitude and heading, and their fuselage blocks firing at any targets beneath them.

Gunner's weapons carry about 20% more ammo than do other weapons. If a gunner jams (computer or player) they will automatically begin working to clear the gun. While their chance is lower than pilots to unjam, their weapons are never broken. Pilots be warned: you will not be told when a gunner has fixed his jam. You will only find out when he starts to shoot at you.

Computer pilots of two seater recon craft act just like their historic counterparts; at the first sign of enemy aircraft, they will fly for home, level, at top speed. They will only maneuver when an enemy scout gets too close.

Computer pilots of two seater fighters, on the other hand, act just like other fighters.

• **FOURTH OPTION, PILOT TYPES.** If the player wishes to redefine the pilot of a certain plane, this is the time to change it. Both aircraft and gunners can be defined as controlled by the computer or a pilot, and both can be aces and super-aces. Aces (people with 5 or more kills) and super aces (20 or more kills) get both increased gunnery chances as well as extra chances to avoid damage.

Note that all newly created aircraft are manned by the computer

unless changed by this option.

• **FIFTH OPTION, BALLOONS.** During the war, both sides often relied on balloons to direct artillery fire and spy out enemy movements. These gas-bags are protected by a heavy ring of anti-aircraft guns, which shoot at targets within one square of their position (they, unlike planes, can shoot diagonally). Their accuracy is at its highest when shooting at targets close to the ground.

A balloon takes up the space of five aircraft. If the side using balloons only has one balloon up, the balloon is placed in the last five array spaces, so that up to five aircraft can be used in the first five spaces. If two balloons are up, no fighters may be used.

Note that in order to save time, the computer will skip redrawing the screen if a gun does not fire. As soon as an AA gun gets a shot, the screen will be re-drawn.

Once play begins, the balloon's crew will begin to winch the balloon down as fast as they can (about 75' to 125' per turn). Once the balloon is on the ground or destroyed, both the balloon and its anti-aircraft defense are removed from play. Note that players are not allowed to attack the anti-aircraft guns, as they are too well dug in.

CREDITS

Game Design/Rules

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Atari Programming

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Apple Programming

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Historical Background

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Art & Graphic Design

Image Creations

Typesetting

Abra Type

Printing

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EAGLES

COMMODORE 64™ VERSION

Loading Instructions:

- Turn on your computer and monitor.
- Turn on your disk drive.
- When the red light on the disk drive is off, insert the EAGLES™ game disk.
- Type LOAD"***",8
- When the READY prompt appears, type RUN.

Keystroke Commands:

- The Commodore 64™ version of EAGLES makes use of the same keys used by the Apple II+ version. The Apple II+ keys are listed in the rules booklet.

STRATEGIC SIMULATIONS INC

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— AIRCRAFT CAPABILITIES —

Here is a list of the aircraft types available for *EAGLES™*. Dates of operational use are included for scenario development.

AIRCRAFT TYPE	M%	S%	CI	DI	WP	ST	DATES
Allies							
NIEUPORT 17	60	50	4	7	1/1	60	1/17-2/18
NIEUPORT 28	50	70	3	9	2	65	4/18-8/18
SE5a	50	80	4	11	1/1	75	7/17-END
SOPWITH CAMEL	65	70	3	10	2	70	7/17-END
SOPWITH DOLPHIN	50	80	3	11	2	75	1/18-END
SOPWITH PUP	60	50	3	9	1	70	1/17-12/17
SOPWITH TRIPLANE	55	60	3	9	1	70	4/17-10/17
SPAD VII	45	70	3	11	1	75	1/17-12/17
SPAD XIII	50	80	4	12	2	80	10/17-END
BRISTOL F2b	45	45	2	9	1+1	75	4/17-END
Germans							
ALBATROS DIII	45	50	2	8	2	70	1/17-9/18
ALBATROS DV	50	60	3	8	2	70	6/17-END
FOKKER DRI	70	40	5	7	2	65	12/17-END
FOKKER DVII	60	80	4	11	2	80	5/18-END
PHALZ DIII	45	55	2	12	2	75	9/17-END
HANNOVER CL. IIIa	45	45	2	9	1+1	75	12/17-END
STANDARD RECON	30	20	1	7	1+1	60	ENTIRE WAR

M% — Maneuver Percentage

S% — Speed Percentage

CI — Climb in 25' increments

DI — Dive in 25' increments

WP — Weapons: 1 = 1 deck mounted

2 = 2 deck mounted

1/1 = 1 deck mounted, 1 wing mounted

1 + 1 = 1 deck mounted, 1 pivot mounted, two-seater

ST — Structural Strength

DATES — First month/year — last month/year